



TITLE:

Problems on the Breeding of Insects for  
Biological Assay of Insecticides. (XVI) : On the  
Increment of Size of Faecal Pellets following  
the Growth in Larva of the Gypsy Moth,  
*Lymantria dispar* L..

AUTHOR(S):

Nagasawa, Sumio

---

CITATION:

Nagasawa, Sumio. Problems on the Breeding of Insects for Biological Assay of Insecticides. (XVI) : On the Increment of Size of Faecal Pellets following the Growth in Larva of the Gypsy Moth, *Lymantria dispar* L.... Bulletin of the Institute for Chemical Research, Kyoto University 1958, 35(5-6): 164-164

ISSUE DATE:

1958-03-30

URL:

<http://hdl.handle.net/2433/75592>

RIGHT:

ABSTRACTS

**Problems on the Breeding of Insects for Biological Assay  
of Insecticides. (XVI)**

**On the Increment of Size of Faecal Pellets following the Growth in**

**Larva of the Gypsy Moth, *Lymantria dispar* L.**

*Botyu-Kagaku*, 22, 176-82 (1957). (English edition)

Sumio NAGASAWA

(Ohono Laboratory)

Under the constant environmental condition of 25°C and 89% relative humidity, a male larva of the gypsy moth was reared on leaves of the zelkova tree. The width of faecal pellets, i.e. the maximum diameter which meets the longitudinal axis at right angle, was measured, and the rates of its increase on successive days as well as in successive instars were determined. While the trend of the increase of the mean log-width of faecal pellets on successive days showed a curvilinear relation, that of the increase in successive instars showed two straight lines. The same trend was also found in the growth of the width of head capsule. The determination of instar by the size of faecal pellets is possible if we determine the mean width of faecal pellets excreted on successive days separately.

---

**Problems on the Breeding of Insect for Biological Assay  
of Insecticides. (XVII)**

**On the Number of Larval Moults in the "Takatsuki" Race of the Gypsy**

**Moth, *Lymantria dispar* L.**

*Japan. J. Appl. Entomol. Zool.* 1, 27-31 (1957). (English edition)

**Problems on the Breeding of Insects for Biological Assay  
of Insecticides. (XVIII)**

**On the Number of Larval Moults in the "Noheji" Race of the Gypsy**

**Moth, *Lymantria dispar* L.**

*Botyu-Kagaku*, 22, 255-9 (1957)

Sumio NAGASAWA

(Ohono Laboratory)

Under the environmental condition of 25°C and 89% relative humidity, the larvae of the "Takatsuki" and "Noheji" races of the gypsy moth, *Lymantria dispar* L., were reared separately on leaves of the zelkova tree, *Zelkova serrata* Makino. The females of the "Takatsuki" race of the gypsy moth moulted 6 or